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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/897,865 | 07/02/2001 | Giorgio Trapani | M0023/7005 | 1378 |

22832 7590 04/10/2003

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EXAMINER

CURTIS, CRAIG

ART UNIT PAPER NUMBER

2872

DATE MAILED: 04/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/897,865

Applicant(s)

TRAPANI et al.

Examiner

Craig Curtis

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jan 9, 2003
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 6 6) ☐ Other:

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DETAILED ACTION

Disposition of the Instant Application

- This Office action is responsive to Applicants' Amendment A filed on 30 January 2003 and made of record in the file as Paper No. 7.
- By this amendment, Applicants have canceled claims 28 and 29 and amended claims 1, 21-24, and 26. Claims 1-27 currently are pending in the instant application.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- I. Claims 1-27 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for an optical stack, does not reasonably provide enablement for an optical stack, comprising an unsupported intrinsic polarizer having a first surface, the intrinsic polarizer lacking a protective coating; and a first optically functional coating disposed on the first surface of said intrinsic polarizer. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to the invention commensurate in scope with these claims. That is, an intrinsic polarizer on whose first surface a first optically functional coating is disposed cannot be said to

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lack a protective coating thereon, since said optically functional coating inherently protects said intrinsic polarizer.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. More specifically, the meaning of the limitation "...*unsupported intrinsic polarizer*" recited in the claims cannot be ascertained.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 12, 13, 17-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Butterfield et al. (4,747,674) in view of Applicants' Admitted Prior Art.

With regard to claim 1, Butterfield et al. disclose the invention as claimed--an optical stack, comprising:

a polarizer (26 in Fig. 2) having a first surface (between 26 and 24); and

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a first optically functional coating (22 and 24) disposed on the first surface of the polarizer--
EXCEPT FOR an explicit teaching wherein said polarizer is an intrinsic polarizer.

Applicants' Admitted Prior Art, however, acknowledges that intrinsic polarizers are commercially available in the prior art (See, e.g., pg. 3, ll. 3-9). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the invention of Butterfield et al. such that its polarizer be an intrinsic polarizer, such teaching being acknowledged by Applicants' Admitted Prior Art as well known, for at least the purpose of enhancing generally the performance of said invention by making use of state-of-the-art polarizers introduced since the time of the invention of Butterfield et al.

With regard to claim 2, said intrinsic polarizer of the combination has a second surface (between 18 and 26), which further comprises a second optically functional coating 12, 14, and 16) disposed on the second surface of the intrinsic polarizer (See Fig. 2).

With regard to claims 3 and 4, Applicants' Admitted Prior Art identifies K-type and KE polarizers as being types of intrinsic polarizers.

With regard to claim 5, said first optically functional coating in Butterfield et al. comprises a hardcoat (viz., 22 in Fig. 2).

With regard to claim 12, Butterfield et al. teach wherein said first optically functional coating comprises a retarder layer, and liquid crystal polymer retarder compensation films are notoriously old and well-known in the optical retarder art.

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With regard to claim 13, it is noted that either or both the quarter-wave plate 24 and support layer 22 taught in Butterfield et al. diffuse light passing therethrough.

With regard to claim 17, the combination teaches a layer of adhesive disposed on the second surface of the intrinsic (see 18 in Fig. 2 of Butterfield et al.).

With regard to claim 18, the combination teaches wherein said intrinsic polarizer can be attached to cathode ray tubes, computer display screens and the like (See Abstract of Butterfield et al.), a teaching that is taken to encompass the attachment of same to a liquid crystal display cell.

With regard to claims 19 and 20, Butterfield et al., the primary reference of the combination, teach wherein said adhesive layer 18 can comprise any adhesive material effective to provide a stable lamination without adversely affecting an optical transmission or performance (col. 9, ll. 3-6), a teaching that is taken to encompass both pressure-sensitive and diffuse adhesives, respectively.

With regard to claims 21 and 22, while the combination does not explicitly teach wherein the thickness of said optical stack is less than or about 25 microns, optical stacks having thicknesses less than or about 25 microns are notoriously old and well-known in the optical stack art. Moreover, Applicants have not associated any criticality with the less than or about 25 microns thicknesses relative to one another.

With regard to claims 23-27, please the teaching of the limitations contained therein by the combination as set forth hereinbefore.

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4. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Butterfield et al. (4,747,674) in view of Applicants' Admitted Prior Art, as applied above to claim 1, and further in view of Ralli (5,926,293).

With regard to claim 6, the combination discloses the claimed invention as set forth above EXCEPT FOR an explicit teaching wherein said first optically functional coating comprises a transflector coating.

Ralli, however, teaches an optically functional coating that comprises a transfective (read: transflector) coating (110 in Fig. 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified said first optically functional coating of the combination such that it comprise a transflector coating, as taught explicitly by Ralli, for at least the reason of managing light passing through said first optically functional coating more efficiently than would be possible in the absence of said transflector coating.

With regard to claim 7, Ralli teaches wherein said transflector coating comprises a metal (See col. 4, ll. 66-67--col. 5, ll. 1-2).

With regard to claim 8, Ralli's teaching of a deposited layer of reflective metal meets Applicants' "wherein the first optically functional coating comprises a reflector coating" limitation.

5. Claims 9-11, 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Butterfield et al. (4,747,674) in view of Applicants' Admitted Prior Art, as applied above to claim 1, and further in view of Kumai et al. (JP1194653A).

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With regard to claim 9, the combination discloses the claimed invention as set forth above EXCEPT FOR an explicit teaching wherein said first optically functional coating comprises a an antireflection film. It is noted that the combination does provide a teaching wherein said second optically functional coating comprises an antireflection film

Kumai et al., however, disclose a first optically functional coating that comprises an antireflection film (viz, AR coating film 11b in Fig. 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the first optically functional coating of the combination such that it further comprise an antireflection film, as taught by Kumai et al., for at least the reason of providing a greater degree of control over light passing therethrough.

With regard to claims 10 and 11, it is notoriously old and well-known in the art of antireflection films for such films to comprise, respectively, a plurality of polymer or inorganic layers.

With regard to claim 14, the claimed antiglare film is taken as reading on the antireflection film 11b of the combination.

With regard to claim 15, the claimed wide view film is taken as reading on the support layer 22 of the combination.

With regard to claim 16, the primary reference of the combination (Butterfield et al.) teaches an electrode (ITO layer 14), and the provisioning of electrodes in optically functional coatings is notoriously old and well-known in the optical display art.

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Response to Arguments

6. Applicants' arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

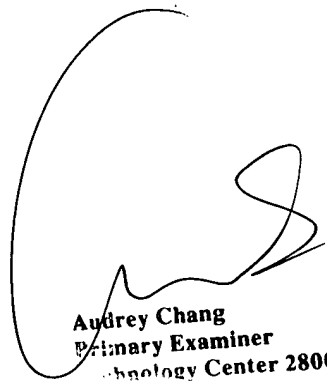
7. The prior art made of record and not relied upon is considered pertinent to Applicants' disclosure: Kadaba et al. (U.S. Pat. No.: 5,973,834) & Bennett et al. (U.S. Pat. No.: 5,666,223) both teach K-type polarizers.

Contact Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Curtis, whose telephone number is (703) 305-0776. The facsimile phone number for Art Unit 2872 is (703) 308-7721.

Any inquiry of a general nature regarding the status of this application should be directed to the Group receptionist, whose telephone number is (703) 308-0956.

Craig H. Curtis
Group Art Unit 2872
31 March 2003



Audrey Chang
Primary Examiner
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